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NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JAN 02	STN pricing information for 2008 now available
NEWS 3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 5	JAN 28	MARPAT searching enhanced
NEWS 6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS 7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS 9	FEB 08	STN Express, Version 8.3, now available
NEWS 10	FEB 20	PCI now available as a replacement to DPCI
NEWS 11	FEB 25	IFIREF reloaded with enhancements
NEWS 12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS 13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS 14	MAR 31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats
NEWS 15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS 16	MAR 31	CA/CAplus and CASREACT patent number format for U.S. applications updated
NEWS 17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS 18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 19	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS 20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS 21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS 22	APR 28	IMSRESEARCH reloaded with enhancements
NEWS 23	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS 24	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS 25	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS 26	JUN 06	KOREAPAT updated with 41,000 documents
NEWS 27	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS 28	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS 29	JUN 25	CA/CAplus and USPAT databases updated with IPC reclassification data
NEWS 30	JUN 30	AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS 31	JUN 30	EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated organizations
NEWS 32	JUN 30	STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in
NEWS 33	JUN 30	STN AnaVist enhanced with database content from EPFULL

```
 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

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* * * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 14:56:27 ON 07 JUL 2008

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'CAPLUS' ENTERED AT 14:56:38 ON 07 JUL 2008
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FILE COVERS 1907 - 7 Jul 2008  VOL 149 ISS 2
FILE LAST UPDATED: 6 Jul 2008  (20080706/ED)

Caplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply.
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http://www.cas.org/legal/infopolicy.html

=> e us2005-551572/apps
E1            1     US2005-551558/AP
E2            2     US2005-551559/AP
E3            1 --> US2005-551572/AP
E4            0     US2005-551572/PRN
E5            1     US2005-551574/AP
E6            1     US2005-551578/AP
E7            1     US2005-551579/AP
E8            1     US2005-551580/AP
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E9            1     US2005-551584/AP
E10           2     US2005-551587/AP
E11           1     US2005-551590/AP
E12           1     US2005-551593/AP

=> s e3
L1            1 US2005-551572/AP

=> sel rn l1
E1 THROUGH E16 ASSIGNED

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.69       2.90

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STRUCTURE FILE UPDATES:    6 JUL 2008  HIGHEST RN 1032827-24-9
DICTIONARY FILE UPDATES:   6 JUL 2008  HIGHEST RN 1032827-24-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> s e1-e16
              1 123948-87-8/BI
                (123948-87-8/RN)
              1 12619-70-4/BI
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              1 149882-10-0/BI
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              1 2644-64-6/BI
                (2644-64-6/RN)
              1 4468-02-4/BI
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              1 527-09-3/BI
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              1 57-88-5/BI
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              1 6485-39-8/BI
                (6485-39-8/RN)
              1 7440-48-4/BI
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1 7440-50-8/BI
(7440-50-8/RN)
1 7440-66-6/BI
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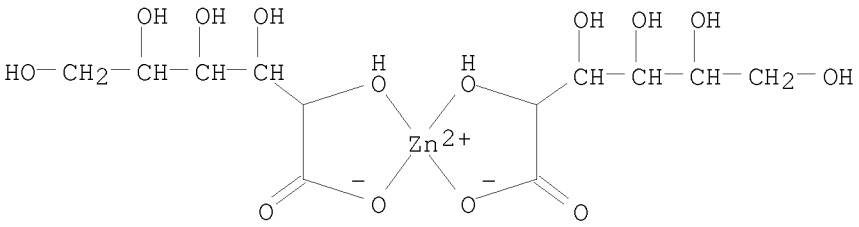
1 7689-03-4/BI
(7689-03-4/RN)
1 773073-40-8/BI
(773073-40-8/RN)
1 816-94-4/BI
(816-94-4/RN)
1 97682-44-5/BI
(97682-44-5/RN)
L2 16 (123948-87-8/BI OR 12619-70-4/BI OR 149882-10-0/BI OR 217939-97-4/BI OR 2644-64-6/BI OR 4468-02-4/BI OR 527-09-3/BI OR 57-88-5/BI OR 6485-39-8/BI OR 7440-48-4/BI OR 7440-50-8/BI OR 7440-66-6/BI OR 7689-03-4/BI OR 773073-40-8/BI OR 816-94-4/BI OR 97682-44-5/BI)

=> d scan l2

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Zinc, bis(D-gluconato-κO1,κO2)-, (T-4)-
MF C12 H22 O14 Zn
CI CCS, COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):16

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Copper
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF Cu
CI COM

Cu

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

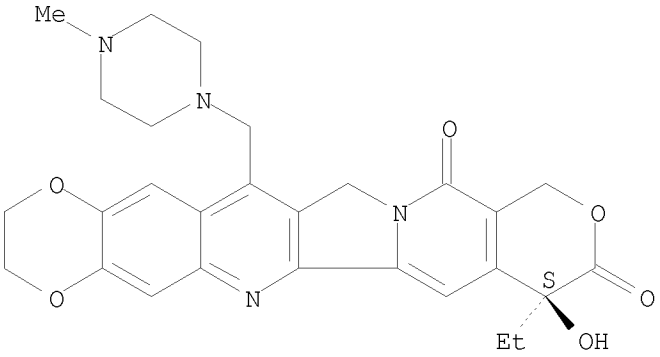
L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Cyclodextrin
MF Unspecified
CI COM, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 11H-1,4-Dioxino[2,3-g]pyrano[3',4':6,7]indolizino[1,2-b]quinoline-9,12(8H,14H)-dione, 8-ethyl-2,3-dihydro-8-hydroxy-15-[(4-methyl-1-piperazinyl)methyl]-, (8S)-
MF C28 H30 N4 O6
CI COM

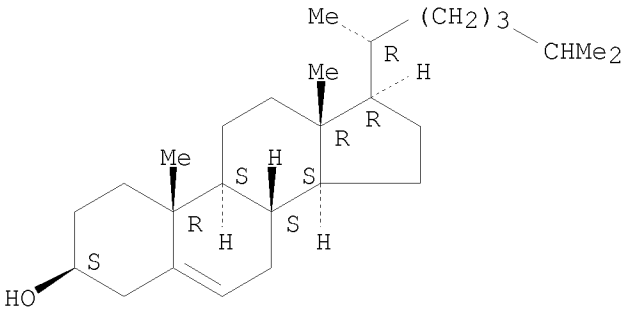
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

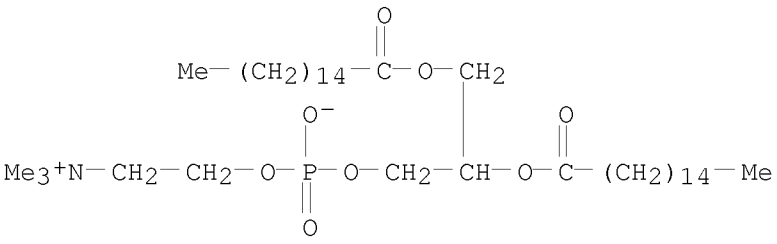
L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Cholest-5-en-3-ol (3β)-
MF C27 H46 O
CI COM

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide
MF C40 H80 N O8 P
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

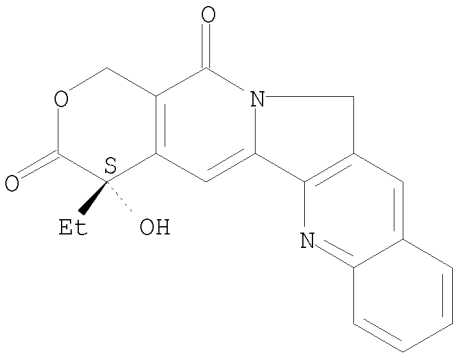
L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Cobalt
MF Co
CI COM

Co

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4-ethyl-4-hydroxy-, (4S)-
MF C20 H16 N2 O4
CI COM

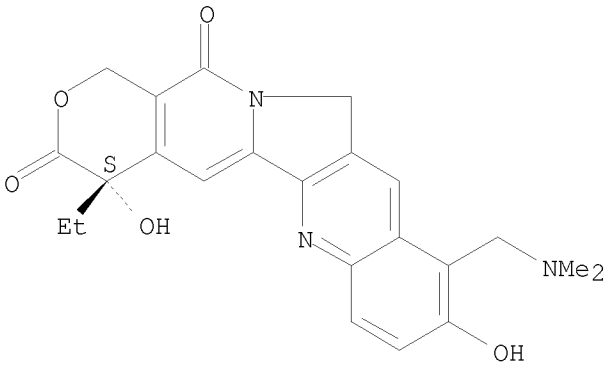
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 10-[(dimethylamino)methyl]-4-ethyl-4,9-dihydroxy-, (4S)-
MF C23 H23 N3 O5
CI COM

Absolute stereochemistry.

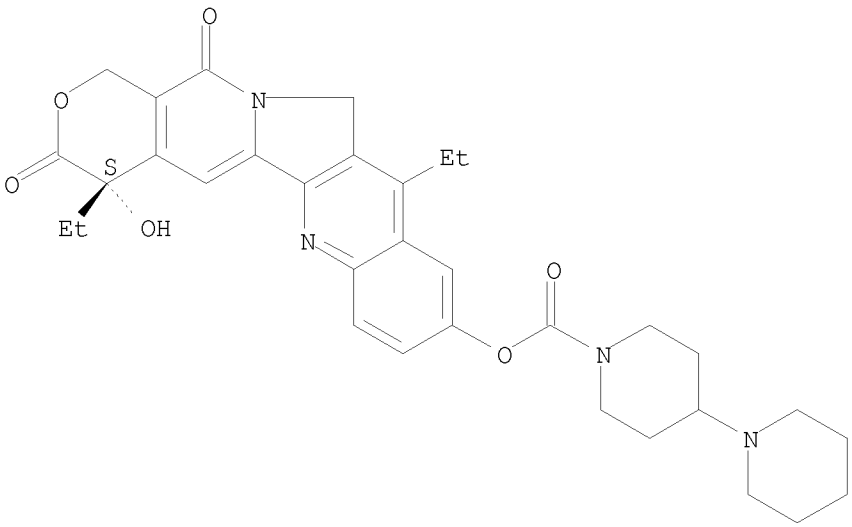


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Uridine, 2'-deoxy-5-fluoro-, mixt. with (4S)-4,11-diethyl-3,4,12,14-tetrahydro-4-hydroxy-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-9-yl [1,4'-bipiperidine]-1'-carboxylate
MF C33 H38 N4 O6 . C9 H11 F N2 O5
CI MXS

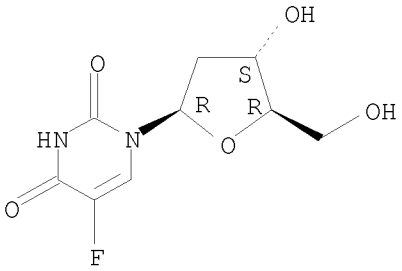
CM 1

Absolute stereochemistry. Rotation (+).



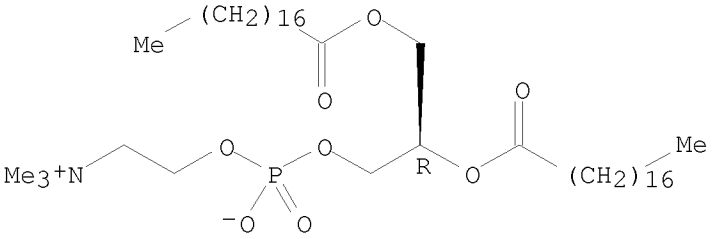
CM 2

Absolute stereochemistry.



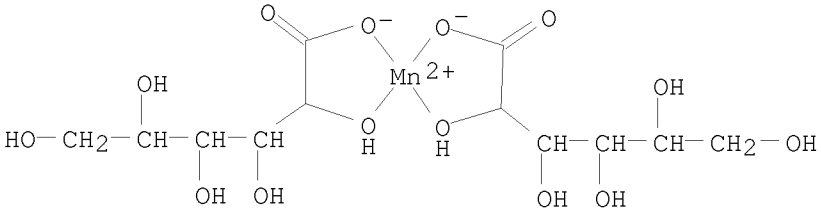
L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)-
MF C44 H88 N O8 P
CI COM

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Manganese, bis(D-gluconato-κO1,κO2)-, (T-4)-
MF C12 H22 Mn O14
CI CCS, COM



L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Zinc

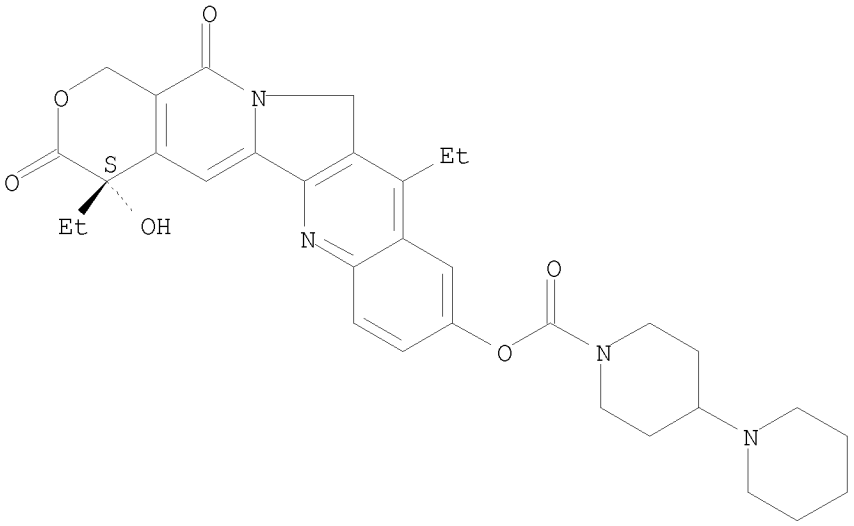
MF Zn
CI COM

Zn

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN [1,4'-Bipiperidine]-1'-carboxylic acid, (4S)-4,11-diethyl-3,4,12,14-tetrahydro-4-hydroxy-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-9-yl ester
MF C33 H38 N4 O6
CI COM

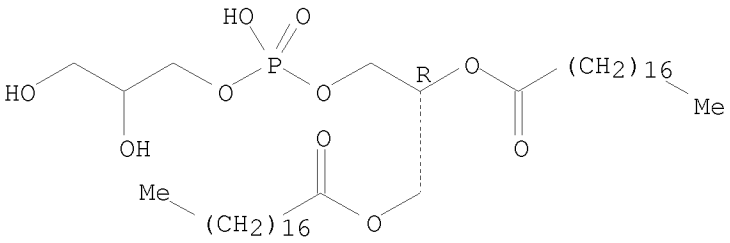
Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

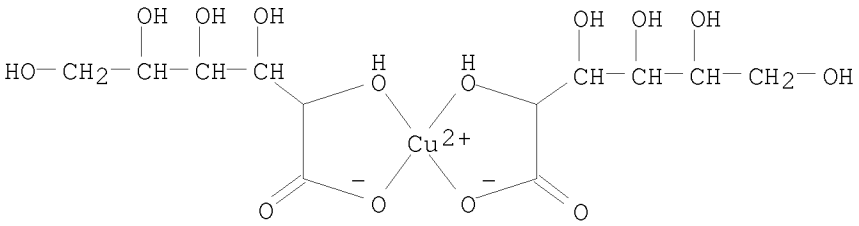
L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Octadecanoic acid, (1R)-1-[[[(2,3-dihydroxypropoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester
MF C42 H83 O10 P
CI COM

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 16 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Copper, bis(D-gluconato-κO1,κO2)-
MF C12 H22 Cu O14
CI CCS, COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus biosis embase medline scisearch
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.92	3.82

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FILE 'SCISEARCH' ENTERED AT 14:58:32 ON 07 JUL 2008
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=> s l2
L3 1567193 L2

```
=> s l3 and ("lactone ring")
L4         329 L3 AND ("LACTONE RING")

=> s l4 and ("transition metal")
L5           4 L4 AND ("TRANSITION METAL")

=> d l5 1-4 hitstr ibib all

L5   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2008 ACS on STN
IT   57-88-5, Cholesterol, biological studies 816-94-4
     RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
        (transition metal-mediated liposomal encapsulation
        of irinotecan stabilizes the drug in therapeutically active lactone
        conformation)
RN   57-88-5  CAPLUS
CN   Cholest-5-en-3-ol (3β)-  (CA INDEX NAME)

Absolute stereochemistry.
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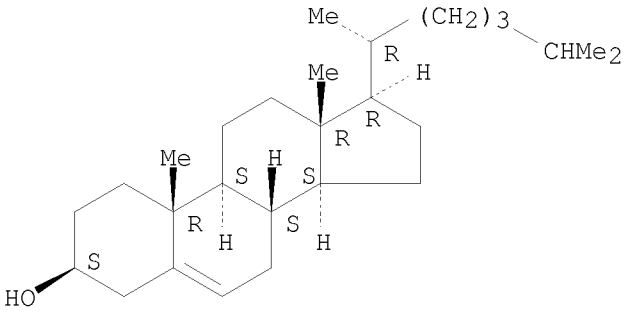


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RN   816-94-4  CAPLUS
CN   3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-
     oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)-  (CA INDEX NAME)

Absolute stereochemistry.
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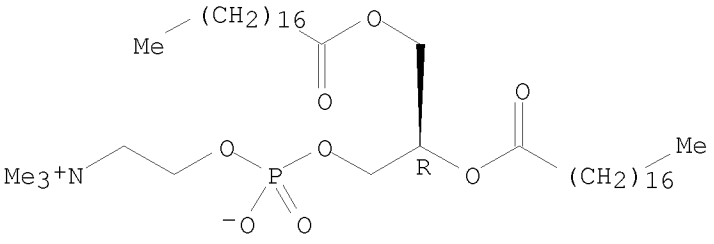


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ACCESSION NUMBER:         2006:1265519  CAPLUS
DOCUMENT NUMBER:          146:107117
TITLE:                    Transition Metal-Mediated
                          Liposomal Encapsulation of Irinotecan (CPT-11)
                          Stabilizes the Drug in the Therapeutically Active
                          Lactone Conformation
AUTHOR(S):                Ramsay, Euan; Alnajim, Jehan; Anantha, Malathi;
                          Taggar, Aman; Thomas, Anitha; Edwards, Katarina;
                          Karlsson, Goeran; Webb, Murray; Bally, Marcel
CORPORATE SOURCE:         Department of Advanced Therapeutics, BC Cancer Agency,
                          Vancouver, BC, V5Z 1L3, Can.
SOURCE:                   Pharmaceutical Research (2006), 23(12), 2799-2808
```

CODEN: PHREEB; ISSN: 0724-8741
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
AN 2006:1265519 CAPLUS
DN 146:107117
ED Entered STN: 05 Dec 2006
TI Transition Metal-Mediated Liposomal Encapsulation of Irinotecan (CPT-11) Stabilizes the Drug in the Therapeutically Active Lactone Conformation
AU Ramsay, Euan; Alnajim, Jehan; Anantha, Malathi; Taggar, Aman; Thomas, Anitha; Edwards, Katarina; Karlsson, Goeran; Webb, Murray; Bally, Marcel
CS Department of Advanced Therapeutics, BC Cancer Agency, Vancouver, BC, V5Z 1L3, Can.
SO Pharmaceutical Research (2006), 23(12), 2799-2808
CODEN: PHREEB; ISSN: 0724-8741
PB Springer
DT Journal
LA English
CC 63-5 (Pharmaceuticals)
AB To determine whether entrapped transition metals could mediate the active encapsulation of the anticancer drug irinotecan into preformed liposomes. Further, to establish that metal complexation could stabilize liposomal irinotecan in the therapeutically active lactone conformation. Irinotecan was added to preformed 1,2-distearoyl-sn-glycero-phosphocholine/cholesterol liposomes prepared in CuSO4, ZnSO4, MnSO4, or CoSO4 solns., and drug encapsulation was determined over time. The roles of the transmembrane pH gradient and internal pH were evaluated. TLC and HPLC were used to monitor drug stability and liposome morphol. was assessed by cryo-TEM. Irinotecan was rapidly and efficiently loaded into preformed liposomes prepared in unbuffered (.apprx.pH 3.5) 300 mM CuSO4 or ZnSO4. For Cu-containing liposomes, results suggested that irinotecan loading occurred when the interior pH and the exterior pH were matched; however, addition of nigericin to collapse any residual transmembrane pH gradient inhibited irinotecan loading. Greater than 90% of the encapsulated drug was in its active lactone form and cryo-TEM anal. indicated dark intravesicular electron-dense spots. Irinotecan is stably entrapped in the active lactone conformation within preformed copper-containing liposomes as a result of metal-drug complexation.
ST transition metal liposome encapsulation irinotecan lactone conformation antitumor
IT Conformation
(lactone ring; transition metal -mediated liposomal encapsulation of irinotecan stabilizes the drug in therapeutically active lactone conformation)
IT Pharmaceutical liposomes
(large unilamellar liposomes; transition metal -mediated liposomal encapsulation of irinotecan stabilizes the drug in therapeutically active lactone conformation)
IT Complexation
(metal; transition metal-mediated liposomal encapsulation of irinotecan stabilizes the drug in therapeutically active lactone conformation)
IT Encapsulation
(microencapsulation; transition metal-mediated liposomal encapsulation of irinotecan stabilizes the drug in therapeutically active lactone conformation)
IT Antitumor agents
Stability
pH
(transition metal-mediated liposomal encapsulation

of irinotecan stabilizes the drug in therapeutically active lactone conformation)

IT Coordination compounds
Transition metals, biological studies
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(transition metal-mediated liposomal encapsulation of irinotecan stabilizes the drug in therapeutically active lactone conformation)

IT 28380-24-7, Nigericin
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(transition metal-mediated liposomal encapsulation of irinotecan stabilizes the drug in therapeutically active lactone conformation)

IT 57-88-5, Cholesterol, biological studies 816-94-4
7733-02-0, Zinc sulfate 7758-98-7, Copper sulfate, biological studies
7785-87-7, Manganese sulfate 10124-43-3, Cobalt sulfate 100286-90-6, Camptosar
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(transition metal-mediated liposomal encapsulation of irinotecan stabilizes the drug in therapeutically active lactone conformation)

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Abraham, S; Biochim Biophys Acta 2002, V1565, P41 CAPLUS
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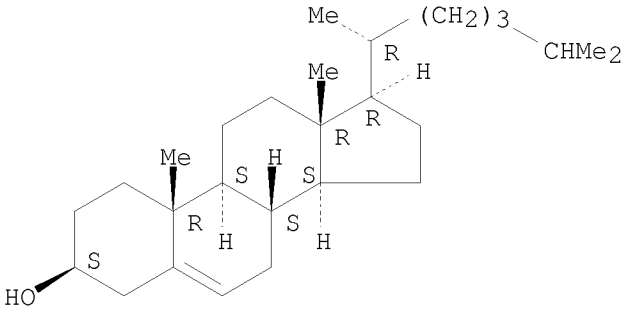
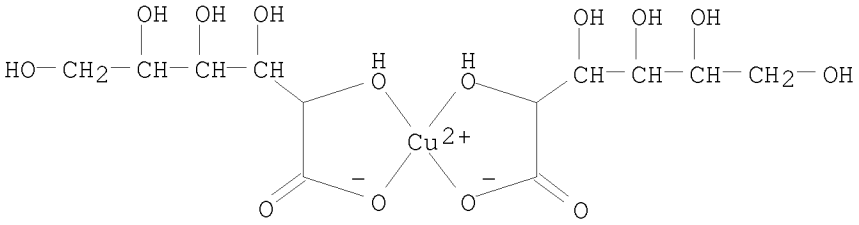
L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
IT 57-88-5, Cholesterol, biological studies 527-09-3,
Copper gluconate 816-94-4, DSPC 2644-64-6, DPPC
4468-02-4, Zinc gluconate 6485-39-8, Manganese gluconate
7440-48-4D, Cobalt, salts 7440-50-8D, Copper, salts
7440-66-6D, Zinc, salts 7689-03-4, Camptothecin
12619-70-4, Cyclodextrins 97682-44-5, Irinotecan
123948-87-8, Topotecan 149882-10-0, Lurtotecan
217939-97-4, DSPG 773073-40-8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing active agents having lactone group and transition metal ions)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.

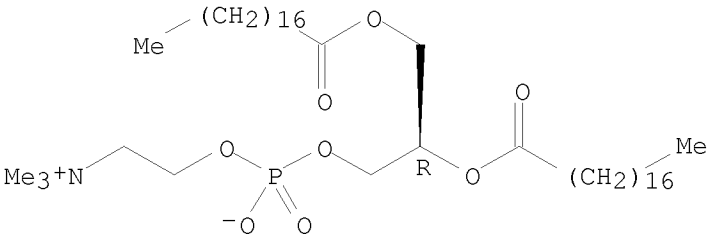


RN 527-09-3 CAPLUS
CN Copper, bis(D-gluconato-κO1,κO2)- (CA INDEX NAME)

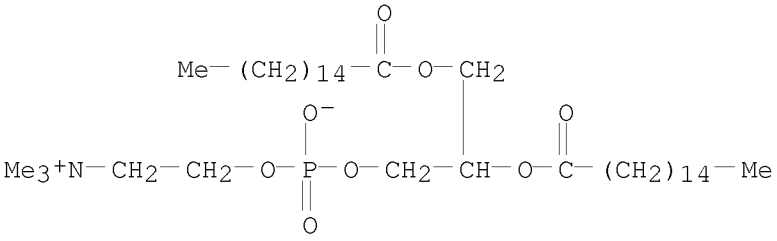


RN 816-94-4 CAPLUS
CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

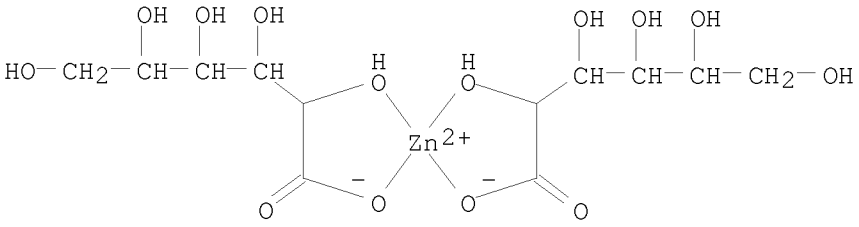
Absolute stereochemistry.



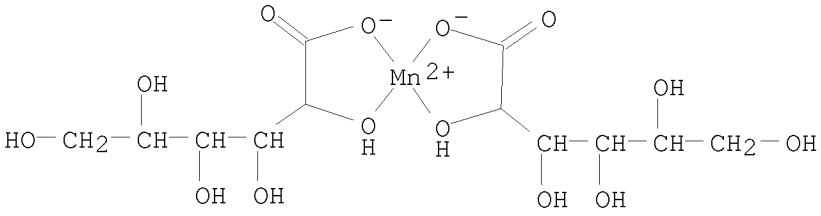
RN 2644-64-6 CAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide (CA INDEX NAME)



RN 4468-02-4 CAPLUS
CN Zinc, bis(D-gluconato-κO1,κO2)-, (T-4)- (CA INDEX NAME)



RN 6485-39-8 CAPLUS
CN Manganese, bis(D-gluconato-κO1,κO2)-, (T-4)- (CA INDEX NAME)



RN 7440-48-4 CAPLUS
CN Cobalt (CA INDEX NAME)

Co

RN 7440-50-8 CAPLUS
CN Copper (CA INDEX NAME)

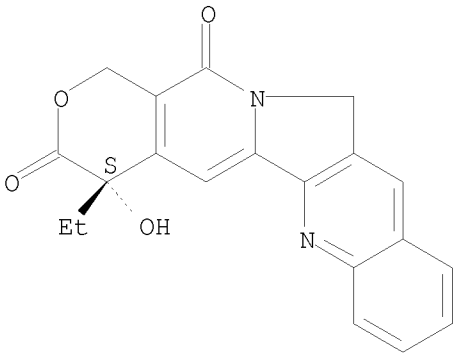
Cu

RN 7440-66-6 CAPLUS
CN Zinc (CA INDEX NAME)

Zn

RN 7689-03-4 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4-ethyl-4-hydroxy-, (4S)- (CA INDEX NAME)

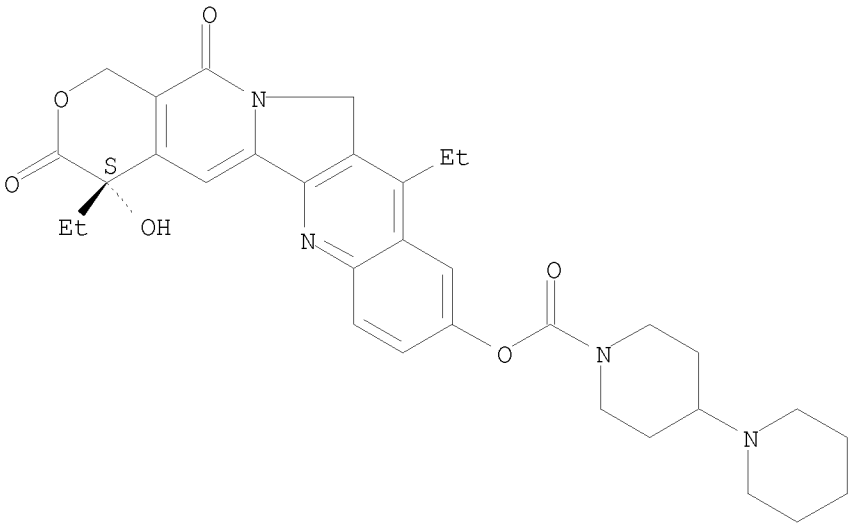
Absolute stereochemistry. Rotation (+).



RN 12619-70-4 CAPLUS
CN Cyclodextrin (CA INDEX NAME)

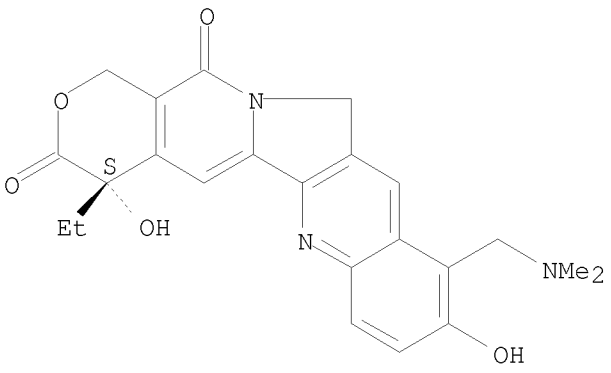
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 97682-44-5 CAPLUS
CN [1,4'-Bipiperidine]-1'-carboxylic acid, (4S)-4,11-diethyl-3,4,12,14-tetrahydro-4-hydroxy-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-9-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



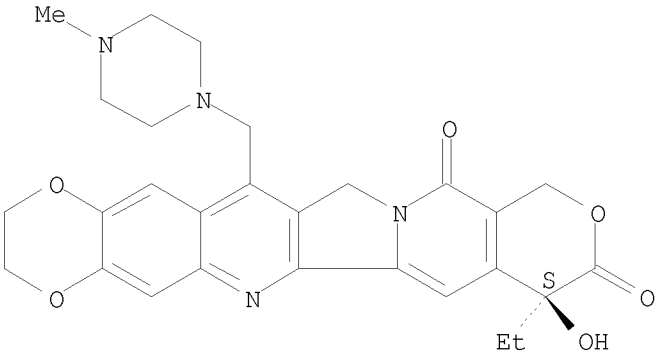
RN 123948-87-8 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 10-[(dimethylamino)methyl]-4-ethyl-4,9-dihydroxy-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



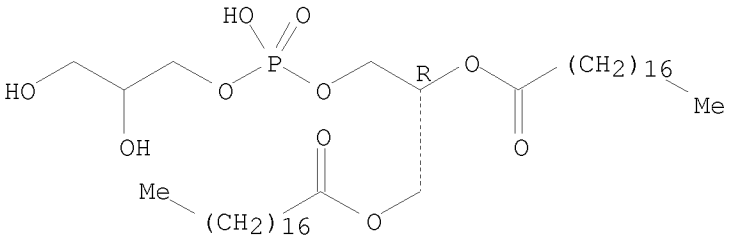
RN 149882-10-0 CAPLUS
CN 11H-1,4-Dioxino[2,3-g]pyrano[3',4':6,7]indolizino[1,2-b]quinoline-9,12(8H,14H)-dione, 8-ethyl-2,3-dihydro-8-hydroxy-15-[(4-methyl-1-piperazinyl)methyl]-, (8S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 217939-97-4 CAPLUS
CN Octadecanoic acid, (1R)-1-[[[(2,3-dihydroxypropoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (CA INDEX NAME)

Absolute stereochemistry.



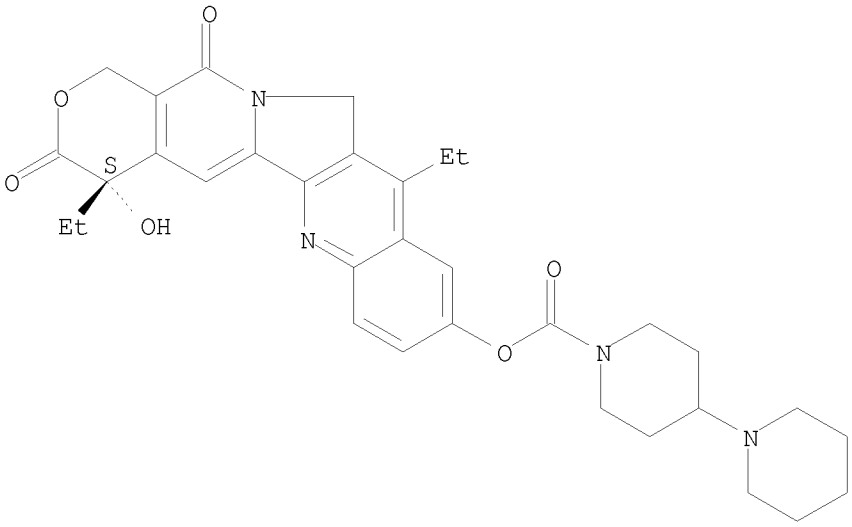
RN 773073-40-8 CAPLUS
CN Uridine, 2'-deoxy-5-fluoro-, mixt. with (4S)-4,11-diethyl-3,4,12,14-tetrahydro-4-hydroxy-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-9-yl [1,4'-bipiperidine]-1'-carboxylate (CA INDEX NAME)

CM 1

CRN 97682-44-5

CMF C33 H38 N4 O6

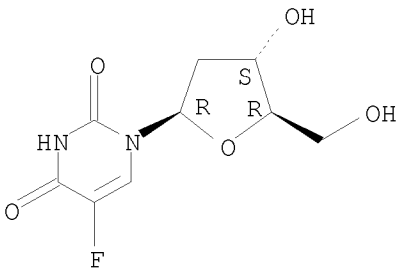
Absolute stereochemistry. Rotation (+).



CM 2

CRN 50-91-9
CMF C9 H11 F N2 O5

Absolute stereochemistry.



ACCESSION NUMBER: 2004:857361 CAPLUS
DOCUMENT NUMBER: 141:337749
TITLE: Pharmaceutical compositions containing active agents having a lactone group and transition metal ions
INVENTOR(S): Tardi, Paul
PATENT ASSIGNEE(S): Celator Technologies, Inc., Can.
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087104	A1	20041014	WO 2004-CA505	20040402

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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
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             TD, TG
     CA 2527130           A1    20041014    CA 2004-2527130        20040402
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     US 20060193902       A1    20060831    US 2005-551572         20050929
PRIORITY APPLN. INFO.:                     US 2003-460171P     P  20030402
                                           WO 2004-CA505       W  20040402

AN   2004:857361  CAPLUS
DN   141:337749
ED   Entered STN:  18 Oct 2004
TI   Pharmaceutical compositions containing active agents having a lactone
     group and transition metal ions
IN   Tardi, Paul
PA   Celator Technologies, Inc., Can.
SO   PCT Int. Appl., 39 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A61K009-127
     ICS  A61K009-51; A61K031-4745; A61K031-7072; A61K047-02
CC   63-6 (Pharmaceuticals)
FAN.CNT 1
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             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
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             TD, TG
     CA 2527130           A1    20041014    CA 2004-2527130        20040402
     EP 1608338           A1    20051228    EP 2004-725256         20040402
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     US 20060193902       A1    20060831    US 2005-551572         20050929
PRAI US 2003-460171P      P     20030402
     WO 2004-CA505        W     20040402
CLASS
 PATENT NO.      CLASS  PATENT FAMILY CLASSIFICATION CODES
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 WO 2004087104   ICM    A61K009-127
                 ICS    A61K009-51; A61K031-4745; A61K031-7072; A61K047-02
                 IPCI   A61K0009-127 [ICM,7]; A61K0009-51 [ICS,7];
                        A61K0031-4745 [ICS,7]; A61K0031-4738 [ICS,7,C*];
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		A61K0031-7072 [ICS,7]; A61K0031-7042 [ICS,7,C*]; A61K0047-02 [ICS,7]
	IPCR	A61K0009-127 [I,C*]; A61K0009-127 [I,A]; A61K0031-4738 [I,C*]; A61K0031-4745 [I,A]; A61K0031-7042 [I,C*]; A61K0031-7072 [I,A]; A61K0033-34 [I,C*]; A61K0033-34 [I,A]; A61K0047-02 [I,C*]; A61K0047-02 [I,A]
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CA 2527130	IPCI	A61K0009-127 [I,A]; A61K0009-51 [I,A]; A61K0031-4745 [I,A]; A61K0031-4738 [I,C*]; A61K0031-7072 [I,A]; A61K0031-7042 [I,C*]; A61K0047-02 [I,A]
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US 20060193902	IPCI	A61K0031-4745 [I,A]; A61K0031-4738 [I,C*]; A61K0009-127 [I,A]
	NCL	424/450.000; 514/283.000; 977/907.000
	ECLA	A61K009/00; A61K031/4745

AB Compns. and methods for stabilizing an active agent containing one or more acetone rings are disclosed. The compns., including pharmaceutical compns., ensure that the lactone ring of the active agent is stabilized in the active, ring-closed form due to the inclusion of a transition metal ion. Copper, zinc and manganese gluconate was used to encapsulate irinotecan into liposomes.

ST pharmaceutical liposome lactone transition metal complex stability; copper zinc manganese gluconate irinotecan liposome

IT Drug delivery systems
(emulsions; pharmaceutical compns. containing active agents having lactone group and transition metal ions)

IT Micelles
(lipid, for drug delivery; pharmaceutical compns. containing active agents having lactone group and transition metal ions)

IT Drug delivery systems
(liposomes, injections; pharmaceutical compns. containing active agents having lactone group and transition metal ions)

IT Drug delivery systems
(microparticles, polymer; pharmaceutical compns. containing active agents having lactone group and transition metal ions)

IT Drug delivery systems
(nanoparticles, polymer; pharmaceutical compns. containing active agents having lactone group and transition metal ions)

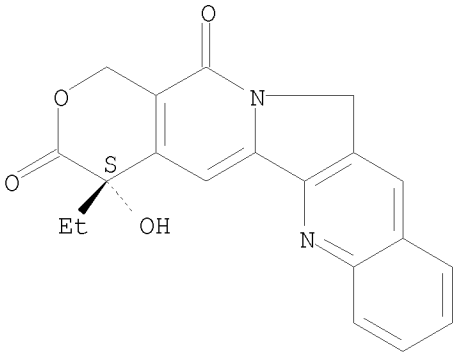
IT Stability
(pharmaceutical compns. containing active agents having lactone group and transition metal ions)

IT Lactones
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. containing active agents having lactone group and transition metal ions)
IT Liposomes
(unilamellar; pharmaceutical compns. containing active agents having lactone group and transition metal ions)
IT Transition metal complexes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with the active agent; pharmaceutical compns. containing active agents having lactone group and transition metal ions)
IT 57-88-5, Cholesterol, biological studies 527-09-3, Copper gluconate 816-94-4, DSPC 2644-64-6, DPPC 4468-02-4, Zinc gluconate 6485-39-8, Manganese gluconate 7440-48-4D, Cobalt, salts 7440-50-8D, Copper, salts 7440-66-6D, Zinc, salts 7689-03-4, Camptothecin 12619-70-4, Cyclodextrins 97682-44-5, Irinotecan 123948-87-8, Topotecan 149882-10-0, Lurtotecan 217939-97-4, DSPG 773073-40-8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing active agents having lactone group and transition metal ions)
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Giovanella, B; US 20020131997 A1 2002
(2) Henderson, R; US 5364845 A 1994 CAPLUS
(3) Hertzberg, R; BIOCHEMISTRY 1989, V28(11), P4629 CAPLUS
(4) Kostova, I; ARCHIV DER PHARMAZIE (WEINHEIM) 2001, V344(5), P157
(5) Kostova, I; EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY 1999, V34(1), P63 CAPLUS
(6) Kuwahara, J; BIOCHEMISTRY 1986, V25(6), P1216 CAPLUS
(7) Kuwahara, J; NUCLEIC ACIDS SYMPOSIUM SERIES 1985, 16, P201 MEDLINE
(8) Manolov, I; EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY 1999, V34(10), P853 CAPLUS
(9) Pearson, D; US 20020061870 A1 2002
(10) Shew, C; WO 03028696 A 2003 CAPLUS
(11) Tenovuo, J; JOURNAL OF ORAL REHABILITATION 1997, V24(5), P325 CAPLUS
(12) Webb, M; WO 0185131 A 2001 CAPLUS
(13) Webb, M; WO 03028697 A 2003 CAPLUS

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
IT 7689-03-4P, 20(S)-Camptothecin
RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(process for purifying 20(S)-camptothecin via palladium catalyzed hydrogenation)
RN 7689-03-4 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4-ethyl-4-hydroxy-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



ACCESSION NUMBER: 2002:616406 CAPLUS
DOCUMENT NUMBER: 137:155091
TITLE: Process for purifying 20(S)-camptothecin via catalytic hydrogenation
INVENTOR(S): Sobotta, Rainer; Rapp, Armin
PATENT ASSIGNEE(S): Germany
SOURCE: U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020111489	A1	20020815	US 2002-51707	20020117
US 6476225	B2	20021105		
DE 10106969	C1	20021002	DE 2001-10106969	20010215
CA 2435372	A1	20020822	CA 2002-2435372	20020209
WO 2002064597	A2	20020822	WO 2002-EP1375	20020209
WO 2002064597	A3	20021024		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002244711	A1	20020828	AU 2002-244711	20020209
AU 2002244711	B2	20070531		
EP 1362051	A2	20031119	EP 2002-712902	20020209
EP 1362051	B1	20050803		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EE 200300389	A	20031215	EE 2003-389	20020209
HU 2003003030	A2	20031229	HU 2003-3030	20020209
HU 2003003030	A3	20041129		
CN 1491228	A	20040421	CN 2002-804991	20020209
BR 2002007261	A	20040615	BR 2002-7261	20020209
JP 2004521909	T	20040722	JP 2002-564528	20020209
AT 301124	T	20050815	AT 2002-712902	20020209
ES 2246389	T3	20060216	ES 2002-712902	20020209
NZ 528039	A	20060224	NZ 2002-528039	20020209
ZA 2003005364	A	20040428	ZA 2003-5364	20030711

IN 2003DN01197	A	20050225	IN 2003-DN1197		20030730
BG 108064	A	20050430	BG 2003-108064		20030806
MX 2003PA07194	A	20031204	MX 2003-PA7194		20030812
KR 813087	B1	20080317	KR 2003-710605		20030812
NO 2003003614	A	20030814	NO 2003-3614		20030814
HK 1064092	A1	20060203	HK 2004-106806		20040908
PRIORITY APPLN. INFO.:			DE 2001-10106969	A	20010215
			US 2001-274354P	P	20010308
			WO 2002-EP1375	W	20020209

OTHER SOURCE(S): CASREACT 137:155091; MARPAT 137:155091
AN 2002:616406 CAPLUS
DN 137:155091
ED Entered STN: 16 Aug 2002
TI Process for purifying 20(S)-camptothecin via catalytic hydrogenation
IN Sobotta, Rainer; Rapp, Armin
PA Germany
SO U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM C07D491-14
INCL 546048000
CC 31-5 (Alkaloids)
Section cross-reference(s): 11
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20020111489	A1	20020815	US 2002-51707	20020117
US 6476225	B2	20021105		
DE 10106969	C1	20021002	DE 2001-10106969	20010215
CA 2435372	A1	20020822	CA 2002-2435372	20020209
WO 2002064597	A2	20020822	WO 2002-EP1375	20020209
WO 2002064597	A3	20021024		
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AU 2002244711	A1	20020828	AU 2002-244711	20020209
AU 2002244711	B2	20070531		
EP 1362051	A2	20031119	EP 2002-712902	20020209
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AT 301124	T	20050815	AT 2002-712902	20020209
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NZ 528039	A	20060224	NZ 2002-528039	20020209
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	KR 813087	B1	20080317	KR 2003-710605	20030812
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	HK 1064092	A1	20060203	HK 2004-106806	20040908
PRAI	DE 2001-10106969	A	20010215		
	US 2001-274354P	P	20010308		
	WO 2002-EP1375	W	20020209		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20020111489	ICM	C07D491-14
	INCL	546048000
	IPCI	C07D0491-14 [ICM,7]; C07D0491-00 [ICM,7,C*]
	IPCR	C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	NCL	546/048.000
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
DE 10106969	IPCI	C07D0491-22 [ICM,7]; C07D0491-00 [ICM,7,C*]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
CA 2435372	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
WO 2002064597	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
AU 2002244711	IPCI	C07D0491-00 [I,C*]; C07D0491-14 [I,A]; B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-22 [I,A]
	IPCR	C07D0491-00 [I,C*]; C07D0491-14 [I,A]; B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-22 [I,A]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
EP 1362051	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
EE 200300389	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
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	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
HU 2003003030	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
CN 1491228	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
BR 2002007261	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
JP 2004521909	IPCI	C07D0491-22 [ICM,7]; C07D0491-00 [ICM,7,C*]; B01D0009-02 [ICS,7]; B01D0009-00 [ICS,7,C*]

	IPCR	C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	FTERM	4C050/AA01; 4C050/AA07; 4C050/BB04; 4C050/CC07; 4C050/DD02; 4C050/EE02; 4C050/FF02; 4C050/GG03; 4C050/HH01
AT 301124	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
ES 2246389	IPCI	C07D0491-04 [ICS,4]; C07D0491-00 [ICS,4,C*]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
NZ 528039	IPCI	C07D0491-04 [ICS,7]; C07D0491-00 [ICS,7,C*]; C07C0007-163 [ICS,7]; C07C0007-17 [ICS,7]; C07C0007-00 [ICS,7,C*]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C
ZA 2003005364	IPCI	C07D [ICM,7]
IN 2003DN01197	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
BG 108064	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
	IPCR	C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
MX 2003PA07194	IPCI	C07D0491-04 [ICM,7]; C07D0491-00 [ICM,7,C*]
KR 813087	IPCI	C07D0491-052 [I,A]; C07D0491-00 [I,C*]
NO 2003003614	IPCI	C07D [ICM,7]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
HK 1064092	IPCI	C07D [ICS,7]
	IPCR	B01D0009-00 [I,C*]; B01D0009-02 [I,A]; C07D0491-00 [I,C*]; C07D0491-14 [I,A]; C07D0491-22 [I,A]
	ECLA	C07D491/14+221C+221B+209C; C07D491/22+311B+221C+221B+209C

OS CASREACT 137:155091; MARPAT 137:155091

AB A process for purifying 20(S)-camptothecin, comprising the following steps: (a) combining an aqueous base and a starting material containing 20(S)-camptothecin to convert the lactone ring of the 20(S)-camptothecin into a carboxylate salt; (b) hydrogenating to the product of step (a) in the presence of a transition metal catalyst; (c) acidifying the aqueous phase of the product of step (b) to form 20(S)-camptothecin crystals; (d) adding at least one polar aprotic solvent to the product of step (c); and (e) separating off the purified 20(S)-camptothecin crystals. Thus, a crude extract obtained from Nothapodytes foetida containing camptothecin, 1.33% 18-dehydrocamptothecin, and 0.47% 9-methoxycamptothecin was taken up in a 2N NaOH soln and hydrogenated using Pd/C for 8 h. The hydrogenated mixture was treated with concentrated HCl and adjusted to a pH of 4.0-4.5 and then combined with DMF and stirred for 2.5 h at 90-100°, slowly the resulting mixture was cooled to rt and filtered. The 20(S)-camptothecin crystals, obtained were washed with MeOH and contained 94.2% of the 20(S)-camptothecin input with <0.05% of 18-dehydrocamptothecin and 0.11% of 9-methoxycamptothecin. A similar sequence which used 10% H_2SO_4 instead of concentrated HCl resulted in 92.6% of 20(S)-camptothecin input with 0.09% of 9-methoxycamptothecin and no detectable 18-dehydrocamptothecin.

ST camptothecin purifn hydrogenation palladium catalyst

IT Hydrogenation
(process for purifying 20(S)-camptothecin via palladium catalyzed hydrogenation)

IT 7440-05-3, Palladium, uses

RL: CAT (Catalyst use); USES (Uses)
(process for purifying 20(S)-camptothecin via palladium catalyzed hydrogenation)

IT 7689-03-4P, 20(S)-Camptothecin
RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(process for purifying 20(S)-camptothecin via palladium catalyzed hydrogenation)

IT 68-12-2, N,N-Dimethylformamide, uses 80-73-9, 1,3-Dimethylethyleneurea 127-19-5, N,N-Dimethylacetamide 872-50-4, N-Methylpyrrolidone, uses 7226-23-5, 1,3-Dimethylpropyleneurea
RL: NUU (Other use, unclassified); USES (Uses)
(process for purifying 20(S)-camptothecin via palladium catalyzed hydrogenation)

IT 39026-92-1, 9-Methoxycamptothecin
RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
(process for purifying 20(S)-camptothecin via palladium catalyzed hydrogenation)

IT 119403-33-7, 18-Dehydrocamptothecin
RL: OCU (Occurrence, unclassified); RCT (Reactant); OCCU (Occurrence); RACT (Reactant or reagent)
(process for purifying 20(S)-camptothecin via palladium catalyzed hydrogenation)

IT 64-19-7, Acetic acid, reactions 76-05-1, Trifluoroacetic acid, reactions 1310-73-2, Sodium hydroxide, reactions 7647-01-0, Hydrochloric acid, reactions 7664-38-2, Phosphoric acid, reactions 7664-93-9, Sulfuric acid, reactions 7697-37-2, Nitric acid, reactions 10034-85-2, Hydroiodic acid 10035-10-6, Hydrobromic acid, reactions
RL: RGT (Reagent); RACT (Reactant or reagent)
(process for purifying 20(S)-camptothecin via palladium catalyzed hydrogenation)

L5 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 2001:56734 BIOSIS
DOCUMENT NUMBER: PREV200100056734
TITLE: Transannular vs intramolecular insertion reactions of transition metal carbenes: Evaluation of a transannular approach to cyclooctane ring synthesis.
AUTHOR(S): Dudones, James D.; Sampson, Paul [Reprint author]
CORPORATE SOURCE: Department of Chemistry, Kent State University, Kent, OH, 44242, USA
psampson@kent.edu
SOURCE: Tetrahedron, (1 December, 2000) Vol. 56, No. 49, pp. 9555-9567. print.
CODEN: TETRAB. ISSN: 0040-4020.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Jan 2001
Last Updated on STN: 12 Feb 2002

AN 2001:56734 BIOSIS
DN PREV200100056734
TI Transannular vs intramolecular insertion reactions of transition metal carbenes: Evaluation of a transannular approach to cyclooctane ring synthesis.
AU Dudones, James D.; Sampson, Paul [Reprint author]
CS Department of Chemistry, Kent State University, Kent, OH, 44242, USA
psampson@kent.edu
SO Tetrahedron, (1 December, 2000) Vol. 56, No. 49, pp. 9555-9567. print.
CODEN: TETRAB. ISSN: 0040-4020.
DT Article
LA English

ED Entered STN: 24 Jan 2001
Last Updated on STN: 12 Feb 2002
AB The efficacy of closing cyclooctane rings via transannular metal-stabilized carbene insertion reactions within an 11-membered macrocyclic lactone ring was explored. The impact of performing these reactions in a transannular fashion was evaluated via a comparative study of closely analogous intramolecular (but not transannular) processes. Closure of a gamma-lactone ring via intramolecular cyclopropanation on a moderately electron-deficient alkene proceeded in good yield under Cu(acac)2 catalysis, whereas analogous transannular cyclopropanation was thwarted by competitive beta-hydride migration. In contrast, use of a more electron-rich methoxy-substituted alkene resulted in successful transannular cyclopropanation to afford the desired cyclooctane ring-containing product.
CC Pharmacology - General 22002
Biochemistry studies - Minerals 10069
Pathology - Therapy 12512
IT Major Concepts
Methods and Techniques; Pharmacology
IT Chemicals & Biochemicals
11-membered macrocyclic lactone ring; alkene: electron-rich, methoxy-substituted; beta-hydride: competitive, migration; copper; cyclooctane ring; electron-deficient alkene; gamma-lactone ring; transition metal carbenes
IT Methods & Equipment
copper-based catalysis: synthetic method; cyclooctane ring synthesis: synthetic method; intramolecular cyclopropanation: synthetic method; intramolecular insertion reactions: synthetic method; transannular cyclopropanation: synthetic method; transannular insertion reactions: synthetic method
IT Miscellaneous Descriptors
medicinal chemistry
RN 7440-50-8 (copper)

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FILE 'CAPLUS' ENTERED AT 14:56:38 ON 07 JUL 2008
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SEL RN L1

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L2 16 S E1-E16

FILE 'CAPLUS, BIOSIS, EMBASE, MEDLINE, SCISEARCH' ENTERED AT 14:58:32 ON 07 JUL 2008
L3 1567193 S L2
L4 329 S L3 AND ("LACTONE RING")
L5 4 S L4 AND ("TRANSITION METAL")

=> s l5 and ("delivery vehicle")
L6 0 L5 AND ("DELIVERY VEHICLE")

=> s (pharmaceutical excipient?) and (carrier?)
L7 640 (PHARMACEUTICAL EXCIPIENT?) AND (CARRIER?)

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=> s l7 and cyclodextrin
L8          25 L7 AND CYCLODEXTRIN

=> s l8 and ("transition metal")
L9           0 L8 AND ("TRANSITION METAL")

=> s l8 and (zinc or copper)
L10          1 L8 AND (ZINC OR COPPER)

=> d l10 1 hitstr ibib all

L10  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2008:640989  CAPLUS
DOCUMENT NUMBER:          149:17710
TITLE:                    Method of preparing solid dosage forms of multi-phasic
                          pharmaceutical compositions comprising adsorbent
                          carrier
INVENTOR(S):              Shenoy, Dinesh; Lee, Robert; Soppimath, Kumaresh;
                          Betageri, Guru
PATENT ASSIGNEE(S):       Novavax, Inc., USA
SOURCE:                   PCT Int. Appl., 33pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
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     WO 2008063910         A2    20080529    WO 2007-US84141         20071108
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
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             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
             MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
             PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:                       US 2006-857511P     P  20061108
AN   2008:640989  CAPLUS
DN   149:17710
ED   Entered STN:  29 May 2008
TI   Method of preparing solid dosage forms of multi-phasic pharmaceutical
     compositions comprising adsorbent carrier
IN   Shenoy, Dinesh; Lee, Robert; Soppimath, Kumaresh; Betageri, Guru
PA   Novavax, Inc., USA
SO   PCT Int. Appl., 33pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A61K
CC   63-6 (Pharmaceuticals)
FAN.CNT 1
     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
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PI   WO 2008063910         A2    20080529    WO 2007-US84141         20071108
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IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
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GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM
PRAI US 2006-857511P P 20061108

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2008063910	ICM	A61K
	IPCI	A61K [ICM,7]

AB Pharmaceutical formulations comprising a multi-phasic pharmaceutical composition, and an adsorbent carrier, where the pharmaceutical formulation is a solid dosage form. Methods for preparing such pharmaceutical compns. are described. Thus, a multiphasic composition was prepared: Et alc. (8.8 wt%) was mixed with polysorbate 80 (9.4 wt%) and soybean oil (50.2 wt%); water (31.6 wt%) was added and the resulting composition was subjected to emulsification; the emulsion was processed using a high-pressure homogenizer. An active pharmaceutical ingredient may be incorporated in the above preparation

ST solid dosage multiphase adsorbent carrier pharmaceutical

IT Glycerides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C16-18; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(apricot kernel; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Mental and behavioral disorders
(attention deficit disorder; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bitter almond; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(borage seed; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Acrylic polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(crosslinked; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Pharmaceutical excipients
(disintegrants; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Nervous system
(dopaminergic; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Alkaloids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ergot; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(esters, with sorbitan, SPAN; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)
IT Castor oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ethoxylated; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)
IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fish; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)
IT Castor oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogenated, ethoxylated, Cremophor RH 40; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)
IT Glycerides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(long-chain; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)
IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(macadamia nut; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)
IT Glycerides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(medium-chain; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)
IT AIDS (disease)
Adrenoceptor agonists
Allergy inhibitors
Analgesics
Anesthetics
Anthelmintics
Anti-infective agents
Anti-inflammatory agents
Antianginal agents
Antiarrhythmics
Antibiotics
Anticoagulants
Anticonvulsants
Antidepressants
Antidiabetic agents
Antidiuretics
Antiemetics
Antihistamines
Antihypertensives
Antimigraine agents
Antioxidants
Antiparkinsonian agents
Antithyroid agents
Antitumor agents
Antitussives
Antiviral agents
Appetite depressants
Astringents
Blood products
Blood substitutes
Cardiovascular agents

Central nervous system agents
Ceratonia
Chelating agents
Cholinergic agonists
Cholinergic antagonists
Coloring materials
Controlled-release drug delivery systems
Corn
Dermatological agents
Dissolution
Diuretics
Expectorants
Flavoring materials
Fungicides
Gastrointestinal agents
Heart, disease
Hemostatics
Hypnotics and Sedatives
Immunosuppressants
Inotropics
Lubricants
Muscarinic antagonists
Muscle relaxants
Nervous system stimulants
Nutrients
Opioid antagonists
Pharmaceutical capsules
Pharmaceutical foams
Pharmaceutical solids
Pharmaceutical tablets
Preservatives
Respiratory system agents
Stabilizing agents
Sweetening agents
Thrombolytics
Vaccines
Vasodilators
Zea mays
(method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Aluminosilicates, biological studies
Bentonite, biological studies
Canola oil
Cardiolipins
Clays, biological studies
Coconut oil
Corn oil
Corticosteroids, biological studies
Cottonseed oil
Essential oils
Fatty acids, biological studies
Gelatins, biological studies
Glycerides, biological studies
Glycolipids
Hormones, animal, biological studies
Interleukins
Jojoba oil
Kaolin, biological studies
Linseed oil
Olive oil
Peanut oil

Perlite
Phosphatidic acids
Phosphatidylcholines, biological studies
Phosphatidylethanolamines, biological studies
Phosphatidylglycerols
Phosphatidylinositols
Phosphatidylserines
Phospholipids, biological studies
Polyoxyalkylenes, biological studies
Polysaccharides, biological studies
Polyurethanes, biological studies
Prostaglandins
Safflower oil
Sex hormones
Silicates, biological studies
Soybean oil
Sphingomyelins
Sunflower oil
Zeolites (synthetic), biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nut; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Lard
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oil; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peppermint; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Adsorbents
(pharmaceutical; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sesame; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vegetable; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(wheat germ; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT 9003-01-4D, crosslinked
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Carbomer; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT 9003-39-8D, crosslinked
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Crospovidone; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT 7631-86-9, Silicon dioxide, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(colloidal; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT 50-70-4, Sorbitol, biological studies 50-99-7, Dextrose, biological studies 57-11-4, Stearic acid, biological studies 57-48-7, Fructose, biological studies 57-50-1, Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 60-33-3, Linoleic acid, biological studies 63-42-3, Lactose 64-17-5, Ethyl alcohol, biological studies 67-56-1, Methyl alcohol, biological studies 67-68-5, Dimethyl sulfoxide, biological studies 69-65-8, Mannitol 69-79-4, Maltose 69-89-6, Xanthine 79-41-4D, Methacrylic acid, derivs., copolymers 87-99-0, Xylitol 99-20-7, Trehalose 100-51-6, Benzyl alcohol, biological studies 102-76-1, Triacetin 110-17-8, Fumaric acid, biological studies 110-27-0, Isopropyl myristate 111-01-3, Squalane 111-62-6, Ethyl oleate 111-90-0 112-80-1, Oleic acid, biological studies 151-21-3, Sodium lauryl sulfate, biological studies 463-40-1, Linolenic acid 471-34-1, Calcium carbonate, biological studies 538-23-8, Tricaprylin 544-35-4, Ethyl linoleate 546-93-0, Magnesium carbonate 557-04-0, Magnesium stearate 557-05-1, Zinc stearate 577-11-7, Docusate sodium 585-86-4, Lactitol 872-50-4, biological studies 1309-48-4, Magnesium oxide, biological studies 1318-00-9, Vermiculite 1327-43-1, Magnesium aluminum silicate 1335-30-4, Aluminum silicate 1338-39-2, Sorbitan monolaurate 1338-41-6, Sorbitan monostearate 1338-43-8, Sorbitan monooleate 1344-95-2D, Calcium silicate, hydrous 1592-23-0, Calcium stearate 7585-39-9D, β- Cyclodextrin, hydroxypropyl-, sulfobutyl ether-7- 7647-14-5, Sodium chloride, biological studies 7757-93-9, Calcium phosphate dibasic 7758-87-4 7778-18-9, Calcium sulfate 9000-01-5, Acacia gum 9000-07-1, Carrageenan 9000-30-0, Guar gum 9000-65-1, Tragacanth 9002-72-6, Growth hormone 9002-89-5, Polyvinyl alcohol 9003-07-0, Polypropylene 9003-39-8, Povidone 9004-32-4, Carboxymethyl cellulose sodium 9004-34-6D, Cellulose, derivs., polymers 9004-35-7 9004-38-0, Cellulose acetate phthalate 9004-53-9, Dextrin 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methylcellulose 9004-74-4, Methoxypolyethylene glycol 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9005-38-3, Sodium alginate 9005-64-5, Polysorbate 20 9005-65-6, Polysorbate 80 9005-66-7, Polysorbate 40 9005-67-8, Polysorbate 60 9007-48-1, Polyglyceryl oleate 9010-88-2 9012-76-4, Chitosan 9016-45-9, TERGITOL NP-40 9034-39-3, Growth hormone-releasing hormone 9034-40-6, Luteinizing hormone releasing hormone 9050-04-8 9050-36-6, Maltodextrin 9063-38-1, Sodium starch glycolate 10191-41-0, DL-α-Tocopherol 12174-11-7, Attapulgite 12619-70-4, Cyclodextrin 14807-96-6, Talc, biological studies 17465-86-0, γ- Cyclodextrin 18641-57-1, Glyceryl behenate 22788-19-8, Propylene glycol dilaurate 25086-15-1, Poly(methacrylic acid-methyl methacrylate) 25086-89-9 25087-26-7D, Polymethacrylic acid, derivs., polymers 25212-88-8, Poly(ethyl acrylate-Methacrylic acid) 25322-68-3, Polyethylene oxide 25496-72-4, Glyceryl monooleate 26266-57-9, Sorbitan monopalmitate 26266-58-0, Sorbitan trioleate 27194-74-7 31566-31-1, Glyceryl monostearate 68424-04-4, Polydextrose 71012-10-7, Tetraglyceryl monooleate 74811-65-7, Croscarmellose sodium 106392-12-5, Poloxamer 106602-88-4 176049-28-8 691397-13-4, PLURONIC
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

IT 9004-34-6, Cellulose, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(microcryst.; method of preparing solid dosage forms of multi-phasic pharmaceutical compns. comprising adsorbent carrier)

=> d his

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     (FILE 'HOME' ENTERED AT 14:56:27 ON 07 JUL 2008)

     FILE 'CAPLUS' ENTERED AT 14:56:38 ON 07 JUL 2008
                E US2005-551572/APPS
L1            1 S E3
                SEL RN L1

     FILE 'REGISTRY' ENTERED AT 14:57:18 ON 07 JUL 2008
L2           16 S E1-E16

     FILE 'CAPLUS, BIOSIS, EMBASE, MEDLINE, SCISEARCH' ENTERED AT 14:58:32 ON
     07 JUL 2008
L3      1567193 S L2
L4          329 S L3 AND ("LACTONE RING")
L5            4 S L4 AND ("TRANSITION METAL")
L6            0 S L5 AND ("DELIVERY VEHICLE")
L7          640 S (PHARMACEUTICAL EXCIPIENT?) AND (CARRIER?)
L8           25 S L7 AND CYCLODEXTRIN
L9            0 S L8 AND ("TRANSITION METAL")
L10           1 S L8 AND (ZINC OR COPPER)

=> s l8 and ("lipid carrier")
L11           0 L8 AND ("LIPID CARRIER")

=> s ("lipid carrier") and (micelle? or nanoparticle?)
L12         358 ("LIPID CARRIER") AND (MICELLE? OR NANOPARTICLE?)

=> s l12 and ("polymeric carrier?")
L13           0 L12 AND ("POLYMERIC CARRIER?")

=> s l12 and polymer?
L14          37 L12 AND POLYMER?

=> d his

     (FILE 'HOME' ENTERED AT 14:56:27 ON 07 JUL 2008)

     FILE 'CAPLUS' ENTERED AT 14:56:38 ON 07 JUL 2008
                E US2005-551572/APPS
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                SEL RN L1

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L6            0 S L5 AND ("DELIVERY VEHICLE")
L7          640 S (PHARMACEUTICAL EXCIPIENT?) AND (CARRIER?)
L8           25 S L7 AND CYCLODEXTRIN
L9            0 S L8 AND ("TRANSITION METAL")
L10           1 S L8 AND (ZINC OR COPPER)
L11           0 S L8 AND ("LIPID CARRIER")
L12         358 S ("LIPID CARRIER") AND (MICELLE? OR NANOPARTICLE?)
L13           0 S L12 AND ("POLYMERIC CARRIER?")
L14          37 S L12 AND POLYMER?

=> s l14 and l8
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L15          0 L14 AND L8

=> s l14 or l8
L16         62 L14 OR L8

=> s l16 and l5
L17          0 L16 AND L5

=> s l16 or l5
L18         66 L16 OR L5

=> s l18 and l4
L19          4 L18 AND L4

=> dup rem l19 l5
PROCESSING COMPLETED FOR L19
PROCESSING COMPLETED FOR L5
L20           4 DUP REM L19 L5 (4 DUPLICATES REMOVED)
                ANSWERS '1-3' FROM FILE CAPLUS
                ANSWER '4' FROM FILE BIOSIS

=> d l20 and polymers
'AND' IS NOT A VALID FORMAT
'POLYMERS' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files.  Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):d l20 and polymers
'D' IS NOT A VALID FORMAT
'L105' IS NOT A VALID FORMAT
'AND' IS NOT A VALID FORMAT
'POLYMERS' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files.  Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):ibib

L20  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2008 ACS on STN  DUPLICATE 1
ACCESSION NUMBER:        2006:1265519  CAPLUS
DOCUMENT NUMBER:         146:107117
TITLE:                   Transition Metal-Mediated
                         Liposomal Encapsulation of Irinotecan (CPT-11)
                         Stabilizes the Drug in the Therapeutically Active
                         Lactone Conformation
AUTHOR(S):               Ramsay, Euan; Alnajim, Jehan; Anantha, Malathi;
                         Taggar, Aman; Thomas, Anitha; Edwards, Katarina;
                         Karlsson, Goeran; Webb, Murray; Bally, Marcel
CORPORATE SOURCE:        Department of Advanced Therapeutics, BC Cancer Agency,
                         Vancouver, BC, V5Z 1L3, Can.
SOURCE:                  Pharmaceutical Research (2006), 23(12), 2799-2808
                         CODEN: PHREEB; ISSN: 0724-8741
PUBLISHER:               Springer
DOCUMENT TYPE:           Journal
LANGUAGE:                English
REFERENCE COUNT:         36    THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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=> d his

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     FILE 'CAPLUS' ENTERED AT 14:56:38 ON 07 JUL 2008
                E US2005-551572/APPS
L1            1 S E3
                SEL RN L1

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L2           16 S E1-E16

     FILE 'CAPLUS, BIOSIS, EMBASE, MEDLINE, SCISEARCH' ENTERED AT 14:58:32 ON
     07 JUL 2008
L3      1567193 S L2
L4          329 S L3 AND ("LACTONE RING")
L5            4 S L4 AND ("TRANSITION METAL")
L6            0 S L5 AND ("DELIVERY VEHICLE")
L7          640 S (PHARMACEUTICAL EXCIPIENT?) AND (CARRIER?)
L8           25 S L7 AND CYCLODEXTRIN
L9            0 S L8 AND ("TRANSITION METAL")
L10           1 S L8 AND (ZINC OR COPPER)
L11           0 S L8 AND ("LIPID CARRIER")
L12         358 S ("LIPID CARRIER") AND (MICELLE? OR NANOPARTICLE?)
L13           0 S L12 AND ("POLYMERIC CARRIER?")
L14          37 S L12 AND POLYMER?
L15           0 S L14 AND L8
L16          62 S L14 OR L8
L17           0 S L16 AND L5
L18          66 S L16 OR L5
L19           4 S L18 AND L4
L20           4 DUP REM L19 L5 (4 DUPLICATES REMOVED)

=> s l20 and ("chemotherapeutic drug?")
L21           0 L20 AND ("CHEMOTHERAPEUTIC DRUG?")

=> s l20 and irinotecan
L22           2 L20 AND IRINOTECAN

=> dup rem l22 l20
PROCESSING COMPLETED FOR L22
PROCESSING COMPLETED FOR L20
L23           4 DUP REM L22 L20 (2 DUPLICATES REMOVED)
                ANSWERS '1-3' FROM FILE CAPLUS
                ANSWER '4' FROM FILE BIOSIS

=> d his

     (FILE 'HOME' ENTERED AT 14:56:27 ON 07 JUL 2008)

     FILE 'CAPLUS' ENTERED AT 14:56:38 ON 07 JUL 2008
                E US2005-551572/APPS
L1            1 S E3
                SEL RN L1

     FILE 'REGISTRY' ENTERED AT 14:57:18 ON 07 JUL 2008
L2           16 S E1-E16

     FILE 'CAPLUS, BIOSIS, EMBASE, MEDLINE, SCISEARCH' ENTERED AT 14:58:32 ON
     07 JUL 2008
L3      1567193 S L2
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L4          329 S L3 AND ("LACTONE RING")
L5            4 S L4 AND ("TRANSITION METAL")
L6            0 S L5 AND ("DELIVERY VEHICLE")
L7          640 S (PHARMACEUTICAL EXCIPIENT?) AND (CARRIER?)
L8           25 S L7 AND CYCLODEXTRIN
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L18          66 S L16 OR L5
L19           4 S L18 AND L4
L20           4 DUP REM L19 L5 (4 DUPLICATES REMOVED)
L21           0 S L20 AND ("CHEMOTHERAPEUTIC DRUG?")
L22           2 S L20 AND IRINOTECAN
L23           4 DUP REM L22 L20 (2 DUPLICATES REMOVED)
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